# TIME TT2113 Ultrasonic Thickness Gauge


The TT2113 Low Cost Ultrasonic Wall Material Thickness Gauge is a hand held microprocessor controlled thickness gauge specifically designed for measuring the thickness of metallic and non-metallic materials e.g. aluminium, titanium, plastics, ceramics, glass and other good ultrasonic wave-conducting as long as the material has parallel top and bottom surfaces.

With uses in many areas of industry, the TT2113 can perform precise measurements on various types of raw materials, components parts, and assembled machinery. It can also be used to monitor all types of pipes and pressure vessels for loss of thickness due to corrosion.

The TT2113 is very easy to use, after a simple calibration to a known thickness or sound velocity, the gauge will give fast and accurate readings in millimetres. Sound velocities for 5 different materials can be pre-set and 10 thickness readings can be stored in the memory.

## Features

- Automatic calibration of zero point: automatically correct the system errors
- Automatic non-linear compensation: computer software is used to correct the non- linear errors of the probe for the purpose of improving the accuracy
- The upward and downward adjustment keys enable prompt selection of sound velocity, thickness, and check the thickness memory units
- Signal indication of how good well coupled the probe is to the substrate
- Sound velocity can be measured according to the test block's thickness
- Ten thickness values can be stored without loss after turn-off
- Sound velocity of five different materials can be stored directly – no need to search in the conversion table
- Low voltage indication and Automatic turn-off
- Oil proof protection for longer service life

Thickness check of pressure pipelines

Monitoring of wall thickness of vessels easy to corrode such as oil cans

Thickness monitoring of pressure vessels such as boilers

Quality control of forging and casting parts

Routine maintenance of roads and bridges

Corrosion check of ship walls and bottom

## Technical Specifications

| Part Number | Description |
|---|---|
| Measuring range | 1.2 - 225.0mm |
| Display type | 4-digit LCD |
| Minimum display unit | 0.01mm |
| Sound velocity range | 1000m/s - 9999m/s |
| Measuring error | ±(1%H+0.1) mm, H is the actual thickness of the object to be measured. |
| Power supply | two AAA alkaline cells 1.5V |
| Power consumption | Two AAA alkaline cells 1.5V |
| Operating temperature | 0-40℃ |
| Dimensions (mm) | 124 x 68 x 27mm |
| Weight (g) | 140g |

## Packing List

| |
|---|
| TIME® TT2113 Ultrasonic Thickness Gauge |
| 5P10 Straight Probe |
| Couplant |
| 2 x AAA Batteries |
| TIME® Certificate |
| Warranty Card |
| Instruction Manual |

## Accessories

| Type of Probe | Working Frequency | Measuring Thickness Range | Minimum Diameter of Measuring Pipe | Feature |
|---|---|---|---|---|
| 5PØ10 | 5MHz | 1.2 - 225mm | 10mm | Standard Straight Probe |
| 5PØ10/90° | 5MHz | 1.2 - 225mm | 10mm | Right Angle Probe |
| 7PØ6 | 7MHz | 0.75 - 60mm | 6mm | Small diameter probe |
| SZ2.5P | 2.5MHz | 3 - 300mm | 12mm | High penetration for plastics etc |
| ZW5P | 5MHz | 4 - 80mm | 12mm | High Temp up to 300°C |

5PØ10

5PØ10/90°

7PØ6

SZ2.5P

ZW5P